



PATENT APPLICATION

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

In re Application of : Frederick Leslie BROWN
Serial no. : 10/555,921
Confirmation No. : 4319
Filed : with an effective filing date of May 26, 2004
For : FORK LIFT TRUCK WITH A SINGLE FRONT
WHEEL
Group Art Unit : 3611
Examiner : Maurice L. Williams
Docket : CUNANT 1716US

Box AF
The Commissioner for Patents
U.S. Patent & Trademark Office
P. O. Box 1450
Alexandria, VA 22313-1450

**REQUEST FOR PRE-APPEAL BRIEF CONFERENCE
FOR PANEL OF EXAMINERS TO FORMALLY REVIEW
LEGAL AND FACTUAL BASIS OF REJECTIONS**

Dear Sirs:

The associated Notice of Appeal is being filed concurrently herewith and please consider the following upon conducting the requested Pre-Appeal Brief Conference.

REMARKS

Claims 13-16, 20 and 22-27 currently stand rejected, under 35 U.S.C. § 103(e), as being unpatentable over Callan et al. '038 (U.S. Publication No. 2003/0132038) or in the alternative, as being obvious under 35 U.S.C. § 103(a) in view of Callan et al. '038. The Applicant acknowledges and respectfully traverses the raised obviousness rejection in view of the following remarks.

Before discussing the applied prior art, the Applicant respectfully points out that the presently claimed invention relates to a fork lift truck which is designed for use in narrow aisles (typically found in warehouses and the like) where the truck is able to either deposit or remove a load from the face of a stack, in a direction transverse to the length of the aisle. In order to maximize the available storage area of the warehouse, the aisles generally have the narrowest width possible but such width must still be wide enough to permit adequate maneuvering of lift truck in order to deposit or remove a load from a stack. To facilitate maneuvering of lift truck, the lift truck body has a *pair of rear (non driven) ground engaging wheels* mounted on

transverse axes while the lifting mechanism *only has a single ground engaging front wheel* mounted centrally on a transverse axis. In addition, only the front wheel is connected with and driven by the drive means.

Due to such arrangement, the presently claimed single front wheel drive fork lift truck overcomes the steering problems associated with rear wheel drive trucks of this type. Moreover, the single front wheel is always in driving engagement with the floor, irrespective of any irregularities in the surface of the floor, so that there is no need for articulation of the front axle or the problems associated therewith.

As set forth within the first sentence of paragraph [033] of the specification, the presently claimed invention is directed at the first embodiment of the invention in which *only the single front wheel 40 is driven*. That is, each one of the independent claims is limited to the embodiment in which only the front wheel 40 is driven while both of the rear wheels 16 are not driven at all, they are not connectable in any manner with a drive means.

Turning now to the applied art, Callan et al. '038 specifically relates to an arrangement in which the *drive means supplies drive to each and every one of the disclosed wheels and not solely to a single front wheel*, as presently claimed (paragraph [0004], ln. 9). According to Callan et al. '038, each of the front and rear sections 11, 12 of the lift truck has either one or a pair of wheels. It should be appreciated that, according to this reference, that "the lift truck has all wheel drive. In other words, it is possible to operate the lift truck with all wheels being driven" (paragraph [0022], lns. 1-4). The reference further teaches in paragraph [0028], lines 10-14 that it is possible to "have one or both of the wheels 13, 14 or 24, 25 undriven". In the Final Action dated November 27, 2009 paragraph 4, the Examiner asserts that this means that "a drive means is only provided to the front wheel". While this may arguably be true, paragraph [0028], lines 13-14 continues by stating that although drive may only be provided to the front wheel, "the truck is still of all wheel drive design."

Consequently, even though, as noted by the Examiner, under certain circumstances drive means may only be connected to the front wheels of the vehicle, the drive means must be provided to the wheels which are temporarily undriven to have all wheel drive capability. That is, each of the wheels must be drivable by the drive means. This is contrary to claim 13

which recites the limitation of “the lift truck body (12) having a pair of rear ground engaging wheels (16) mounted on transverse axes, without any drive means being provided for driving the rear wheels (16).” The Applicant respectfully contends that this claim limitation is distinct from the Examiner’s assertion that only the single front wheel is drivingly connected to the drive means.

As clearly and specifically disclosed within Callan et al. ‘038, each one of the front wheels, i.e., either the single front wheel or the pair of front wheels are always driven. In addition, with respect to Fig. 4, it is respectfully submitted that the single front wheel and at least one of the pair of rear wheels are driven to provide such “all wheel drive.” That is, according to each embodiment of Callan et al. ‘038, either both front wheels are driven or at least one front and at least one rear wheel is driven. As such, Callan et al. ‘038 fails to in any way teach, suggest, disclose or remotely hint at a lift truck having a single front wheel in which only the single front wheel is driven by the drive, as presently claimed, without driving any rear wheel(s). In view of this claimed distinction, it is respectfully submitted that Callan et al. ‘038 teaches away from the presently claimed invention and thus fails to either anticipate or render obvious the presently claimed invention.

Since each of the wheels is drivable, the Callan et al. ‘038 lift truck is necessarily equipped with at least one of “a differential unit or... a declutching mechanism” (see paragraph [0022], lines 21-22) to selectively disconnect the drive from the rear wheels depending on the sensed steering angle.

In accordance with the claims of the application, since only the front wheel of the inventive lift truck is driven at all times, there is no need to sense the steering angle and no need for a means to controllably connect the drive to rear wheels.

Callan et al. ‘038 is directed at solving the problem of providing differential control of the rear wheels, for all wheel drive lift trucks. As the lift truck according to the claims of the application is not an all wheel vehicle, this problem does not occur. It is not believed to be obvious why one skilled in the art would refer to Callan et al. ‘038 in respect of the claims of the present application.

Moreover it is noted that Callan et al. '038 makes no distinction between embodiments of a single front wheel or two front wheels. However a lift truck with two front wheels, both of which are driven, will suffer from the same problem as a lift truck with two rear wheels, that is the front wheel on the outside of the turn will need to be driven faster than the front wheel on the inside of the turn, in order to provide acceptable maneuverability. Again this problem is solved in accordance with the lift truck as presently claimed by the adoption of a single driven front wheel.

Consequently, it is by no means obvious from the teachings of Callan et al. '038 that improved maneuverability may be achieved by utilizing a single driven front wheel as the only means of driving a lift truck at all times, as claimed in the application.

In summation, Callan et al. '038 discloses a lift truck (see Fig. 4, for example) having a single front wheel and a pair of rear wheels in which *the single front wheel and at least one or both of the rear wheels are driven* by the drive and the lift truck includes a differential drive for the rear wheels when cornering. Callan et al. '038 is more specifically directed at solving a problem which is peculiar to fork lift trucks in which all of the wheels are driven. It is respectfully submitted that this is clearly quite different and distinct from the presently claimed invention in which only the single front wheel is driven while the rear wheels are arranged to "freewheel"—e.g., turn freely without any drive being supplied thereto--so that there is no problem with differential control of the rear wheels. In order to emphasize the above noted distinctions between the presently claimed invention and the applied art, the independent claim 13 of this application recite the features of "without any drive means being provided for driving the rear wheels (16), and the lifting mechanism (14) only having a single ground engaging front wheel (40) mounted centrally on a transverse axis, wherein a sole drive means (40, 46) is drivingly connected to the front wheel (40) only for driving the lift truck (10)". Independent claims 25 and 26 both recite somewhat similar limitations. It is respectfully submitted that such features are believed to clearly and patentably distinguish the presently claimed invention from all of the art of record, including the applied art.

Lastly, claim 21 was rejected, under 35 U.S.C. § 103, as being unpatentable over Callan et al. '038 in view of Hagin et al. '020 (U.S. Patent No. 4,778,020). The Applicant

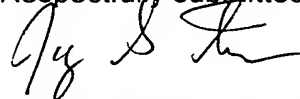
acknowledges and respectfully traverses the raised obviousness rejection in view of the above amendments and the following remarks.

In view of the foregoing, it is respectfully submitted that the raised rejection(s) should be withdrawn and this application is now placed in a condition for allowance. Action to that end, in the form of an early Notice of Allowance, is courteously solicited by the Applicant at this time.

The Applicant respectfully requests that any outstanding objection(s) or requirement(s), as to the form of this application, be held in abeyance until allowable subject matter is indicated for this case.

In the event that there are any fee deficiencies or additional fees are payable, please charge the same or credit any overpayment to our Deposit Account (Account No. 04-0213).

Respectfully submitted,



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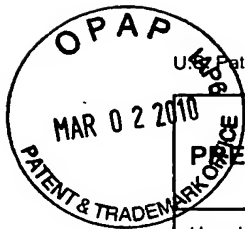
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PRE-APPEAL BRIEF REQUEST FOR REVIEW

Docket Number (Optional)

CUNANT 1716US

I hereby certify that this correspondence is being deposited with the United States Postal Service with sufficient postage as first class mail in an envelope addressed to "Mail Stop AF", Commissioner for Patents, P. O. Box 1450, Alexandria, VA 22313-1450 [37 CFR 1.8(a)]

on **February 25, 2010**

Signature

Typed or printed name

Jay S. Franklin

Application Number
10/555,921

Filed
**with an effective
filing date of May 26,
2004**

First Named Inventor
Frederick Leslie BROWN

Art Unit
3611

Examiner
Maurice L. Williams

The Applicant respectfully requests review of the final rejection in the above-identified application. No amendments are being filed with this request.

This request is being filed with the accompanying Notice of Appeal.

The review is requested for the reason(s) stated on the attached sheet(s).

NOTE: No more than five (5) pages may be provided.

I am the

- ☐ applicant/inventor.
- ☐ assignee of record of the entire interest.
See 37 CFR 3.71. Statement under 37 CFR 3.73(b) is enclosed.
(Form PTO/SB/96)

- ☒ attorney or agent of record.
Registration number **54,105**
- ☐ attorney or agent acting under 37 CFR 1.34.

Registration number if acting under 37 CFR 1.34 _____

Signature

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February 25, 2010

Date

NOTE: Signatures of all the inventors or assignees of record of the entire interest or their representative(s) are required. Submit multiple forms if more than one signature is required, see below*.

☒ * Total of 1 forms are submitted.

This collection of information is required by 35 U.S.C. 132. The information is required to obtain or retain a benefit by the public which is to file (and by the USPTO to process) an application. Confidentiality is governed by 35 U.S.C. 122 and 37 CFR 1.11, 1.14 and 41.6. This collection is estimated to take 12 minutes to complete, including gathering, preparing, and submitting the completed application form to the USPTO. Time will vary depending upon the individual case. Any comments on the amount of time you require to complete this form and/or suggestions for reducing this burden, should be sent to the Chief Information Officer, U.S. Patent and Trademark Office, U.S. Department of Commerce, P.O. Box 1450, Alexandria, VA 22313-1450. DO NOT SEND FEES OR COMPLETED FORMS TO THIS ADDRESS. SEND TO: Mail Stop AF, Commissioner of Patents, P. O. Box 1450, Alexandria, VA 22313-1450.